

Methods are provided for cerebral perfusion augmentation in patients suffering from global or focal cerebral ischemia. Methods include partial or complete obstruction of the femoral or iliac arteries or the inferior vena cava, external compression of the iliac, femoral, or brachial arteries, placing the patient in a trendelenberg position, applying one or more compression members to the extremities, or removing portion(s) of cerebral spinal fluid. Partial obstruction of a vessel can be accomplished by a device comprising an elongate catheter and a distally mounted expandable member. The expandable member may comprise one or two balloons. Other medical devices, such as an angioplasty, stent, or atherectomy catheter, can be inserted distal the expandable member to provide additional therapeutic intervention.